

WHAT IS CLAIMED IS:

1. A vibration compensation device for an optical scanner having a platform for holding a scan document, an optical system and a light-sensing device, the vibration compensation device comprising:

5 a vibration sensor mounted on the light-sensing device of the optical scanner for detecting magnitude of vibration of the light-sensing device;

a controller connected to the vibration sensor for measuring the magnitude of vibration of the light-sensing device and producing a corresponding actuator signal; and

10 an actuator independently connected to the controller and the optical system of the scanner for adjusting the optical system according to the actuator signal such that overall effects due to vibration are minimized.

2. The vibration compensation device of claim 1, wherein the optical system further includes a set of flat mirrors and method of adjusting the optical system through the actuator includes rotating one of the flat mirrors.

15 3. A vibration compensation device for an optical scanner having a platform for holding a scan document, an optical system and a light-sensing device, the vibration compensation device comprising:

a vibration sensor mounted on the light-sensing device of the optical scanner for detecting magnitude of vibration of the light-sensing device;

20 a controller connected to the vibration sensor for measuring the magnitude of vibration of the light-sensing device and producing a corresponding actuator signal; and

an actuator independently connected to the controller and the platform of the scanner for moving the platform according to the actuator signal such that overall effects due to vibration are minimized.

4. A method of compensating the vibration inside an optical scanner having a platform for holding a scan document, an optical system and a light-sensing device, the method comprising:

measuring the magnitude of vibration of the light-sensing device;

5 converting the measured vibration magnitude into an electrical signal so that an actuator signal corresponding to the electrical signal is produced; and

compensating the vibration by adjusting the optical system according to the actuator signal.

5. The method of claim 4, wherein the optical system further includes a set of flat mirrors and the method of adjusting the optical system through the actuator includes rotating one of the flat mirrors.

6. A method of compensating the vibration inside an optical scanner having a platform for holding a scan document, an optical system and a light-sensing device, the method comprising:

15 measuring the magnitude of vibration of the light-sensing device;

converting the measured vibration magnitude into an electrical signal so that an actuator signal corresponding to the electrical signal is produced; and

compensating the vibration by moving the platform according to the actuator signal.